

Notice of Allowability

Application No.

10/015,800

Examiner

Cindy Nguyen

Applicant(s)

TADA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/28/05.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 12/17/01 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

This is in response to communication filed 06/30/05

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Shrinath Malur on 07/12/05.

Claims 1, 6 and 16 had been amended as follows:

At line 1 of claim 1:

1. (amended) An computer apparatus for expanding a character string comprising:

At line 8 of claim 1:

...Arranged in an order of magnitude of [their] emergence probabilities in each group...

At line 1 of claim 6:

6. (amended) In a computer system for retrieving a document ...

At line 12 of claim 6

...Arranged in an order of magnitude of [their] emergence probabilities in each group...

At lines 8 and 15 of claim 16

...Arranged in an order of magnitude of [their] emergence probabilities in each group...

Allowable Subject Matter

Claims 1-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fail to suggest a an apparatus and a program read into and running on a computer to expand a character string, wherein the character string is entered to search image information of documents the program comprising: a similarity table previously storing groups of similar partial character strings, each of the groups of similar partial character strings each consisting of a plurality of characters and arranged in an order of magnitude of emergence probabilities in each group, each of the groups of similar partial character strings being divided from each of the plurality of partial character strings obtained from the character string dividing device by changing at least one of characters of each partial character string to a different character with is similar in shape as recited in claims 1 and 16.

The prior art of record fail to suggest In a computer system for retrieving a document containing a search character string specified by an operator in a search textdocuments that are produced by performing character recognition processing on image documents, a search character string expanding method comprising: a similarity table referencing step of checking the n-character partial character strings (n greater/equal 2) against an n-character-based similarity table, the n-character-based similarity table being generated in advance by storing character strings of similar

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character shapes that are highly likely to be erroneously recognized, each consisting of a plurality of characters and arranged in an order of magnitude of emergence probabilities in each group as recited in claim 6.

As per claims 2-5, 7-15 and 17-20, all the limitations of these claims have been noted in the rejection of claims 1 , 6 and 16 above, respectively. It is therefore allowed

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

N.

Cindy Nguyen
July 12, 2005

Frantz Coby
FRANTZ COBY
PRIMARY EXAMINER